



CAMOSUN COLLEGE
School of Arts & Science
Department of Biology

BIOL-104-001
Infectious Disease
Fall 2018

COURSE OUTLINE

The course description is online @ <http://camosun.ca/learn/calendar/current/web/biol.html>

Ω Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

1. Instructor Information

(a) Instructor	Dominic Bergeron, PhD	
(b) Office hours	Tuesday: 9:30 – 11:30; Wednesday 9:30 – 11:30 & 12:30 – 13:30	
(c) Location	F 248 D	
(d) Phone	250-370-3432	Alternative: _____
(e) E-mail	BergeronD@Camosun.ca	
(f) Website	https://www.youtube.com/user/MachineBiological	

2. Intended Learning Outcomes

(If any changes are made to this part, then the Approved Course Description must also be changed and sent through the approval process.)

Upon completion of this course the student will be able to:

1. Differentiate between bacteria, viruses, fungi, parasites and prions based on structural differences.
2. Analyze the different patterns of transmission and virulence mechanisms used by microorganisms to produce disease.
3. Describe how the nonspecific and specific host defenses work against a variety of organisms.
4. Categorize appropriate methods for treatment and control of infectious agents including physical methods, antibiotics and disinfectants and vaccinations.
5. Demonstrate the ability to practice aseptic technique in the microbiology lab and to use a variety of diagnostic tests to identify infectious agents.

3. Required Materials

- (a) Textbook: Microbiology Openstax Textbook, for FREE download go to:
<https://openstax.org/details/books/microbiology>
- (b) Lab Manual: The lab manual will be available on BIOL 104 D2L website, **there are no copies to purchase at the bookstore.**
- (c) Lab coat: ABSOLUTELY required for ALL lab work. Lab coats will be stored in the microbiology lab for the duration of the semester and will not be available for use in other courses.

4. Course Content and Schedule (Subject to change depending on circumstances)

Week	Dates	LECTURE TOPIC Wednesday	LAB EXERCISE Friday
1	Sept 5, 6	Introduction / Teams / Ice Breaker	Introduction to the Microbiology Lab and Lab Safety Lab 1: Infection Control
2	Sept 12, 14	Introduction: What is microbiology / Infectious diseases	Lab 2: Transfer and Isolation Techniques
3	Sept 19, 24	Case Study #1: Cryptococcosis	Lab 3a: Bacterial Stains
4	Sept 26, 28	Case Study #2: Lyme Disease	Lab 3b: Microscopy
5	Oct 3, 5	Case Study #3: MRSA / Septicemia	Lab 4: Controlling Microbial Growth – Physical Parameters
6	Oct 10, 12	Review Part 1	Lab 5: Controlling Microbial Growth – Chemical Parameters
7	Oct 17, 19	Case Study #4: Cholera	Lab 6: Microbial Contamination of Food and Water
8	Oct 24, 26	Case Study #5: Clostridium difficile	Take Home Lab exam
9	Oct 31, Nov 2	Case Study #6: Legionellosis	Lab 7a: Diagnostic Microbiology
10	Nov 7, 9	Review Part 2	Lab 7b: Diagnostic Microbiology
11	Nov 14, 16	Case Study #7: Meningitidis / Sepsis / Septic Shock	Lab 7c: Diagnostic Microbiology
12	Nov 21, 23	Case Study #8: Toxic Shock Syndrome	Lab 8: Normal Flora / Pathogens of the Nose and Throat
13	Nov 28, 30	Case Study #9: Immunology	Lab 9: ELISA for Tracking an HIV Epidemic
14	Dec 5, 7	Review Part 3	Take Home Lab exam

5. Basis of Student Assessment (Weighting)

(a) Group work (31.5% of final mark)

- a. Weekly class meetings: 9 x 1.5% (13.5%)
- b. Weekly critical thinking assignment: 9 x 2% (18%)

(b) Teaching projects (16% of final mark)

- a. Project #1 (Cryptococcosis) (6%)
- b. Project #2: (Meningitis / Sepsis / Septic shock) (10%)

(c) Exams (52.5% of final mark)

- a. Take home lab exam #1 (Oct 26th) (12.5%)
- b. Take home lab exam #2 (Dec 7th) (12.5%)
- c. Final exam (To be scheduled) (27.5%)

Missed Lecture Exams (Midterms and Final exam)

The final exam must be written at the scheduled time. However, it is understood that emergency circumstances occur (e.g. illness or emergency in the immediate family); for such circumstances accommodation may be offered at the discretion of the instructor, provided the student:

- (a) notifies the instructor in advance of the exam (**not after**), and
- (b) provides documented evidence of the circumstance (i.e. medical certificate).

6. Grading System

- Standard Grading System (GPA)
- Competency Based Grading System

7. Recommended Materials to Assist Students to Succeed Throughout the Course

Please visit my YouTube page. I have several videos directly linked to lab material.
<https://www.youtube.com/user/MachineBiological>

STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism.**
It is the student's responsibility to become familiar with the content of this policy.

The policy is available in each School Administration Office, at Student Services, and the College web site in the Policy Section.

Concerning Academic Honesty, I will assume all students have read and understood the following documents. If you are unsure, confused or have difficulty understanding the information please ask!

- 1) <http://camosun.ca/learn/school/arts-science/images/Arts%20and%20Science%20Academic%20Honesty%20Guidelines.pdf>
- 2) <http://camosun.ca/learn/school/arts-science/images/Arts%20and%20Science%20Academic%20Infraction%20Report.pdf>

8. College Supports, Services and Policies



Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ <http://camosun.ca/about/mental-health/emergency.html> or <http://camosun.ca/services/sexual-violence/get-support.html#urgent>

College Services

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at <http://camosun.ca/>

College Policies

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at <http://camosun.ca/about/policies/>. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate Withdrawal, Sexual Violence and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.

A. GRADING SYSTEMS <http://camosun.ca/about/policies/index.html>

The following two grading systems are used at Camosun College:

1. Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		2
50-59	D		1
0-49	F	Minimum level has not been achieved.	0

2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

Grade	Description
COM	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.

B. Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy at

<http://camosun.ca/about/policies/index.html> for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress:</i> A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
CW	<i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.